



March 10, 2008

Mr. Ross del Rosario U. S. EPA - Region 5 (SR-6J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

Re: Sauget Area 2 Site – October 3, 2002 Unilateral Administrative Order (UAO) Groundwater Operable Unit Monthly Report; February 1 - February 29, 2008 Reporting Period

Dear Mr. del Rosario:

Attached is the Monthly Report for the Sauget Area 2 Site October 3, 2002 Unilateral Administrative Order (UAO) - Groundwater Operable Unit. This submittal is in fulfillment of the monthly reporting requirements of the UAO, Section XII, paragraph 62, <u>Progress Reports</u>. This report is for the period February 1 – February 29, 2008.

Sincerely,

Steven D. Smith A Project Coordinator

cc: Ken Bardo, - U. S. EPA

Mayor Sauget - Sauget, IL

Sandra Bron – IEPA

Mike Coffey - USFWS

Village of Sauget – c/o P. H. Weis & Associates (Attn: Brian Nelson)

Mayor Frank Bergman - Cahokia

L. Glen Kurowski - Monsanto

Cathleen Bumb - Solutia

Linda Tape - Husch & Eppenberger

Richard Williams - Solutia

Sauget Area 2 Site - Sauget, Illinois

October 3, 2002 UAO – Groundwater Operable Unit

Status Report

Date of Report: March 10, 2008

Period Covered: February 1 - February 29, 2008

Work Performed During the Reporting Period

Site Work

• No site work was carried out during the reporting period.

Groundwater Treatment

- As agreed upon with USEPA, the Groundwater Migration Control System (GMCS) continues to be operated to maintain the total pumping rate equal to the computed inflow rate, based on the average of the gradients measured in the two existing pairs of piezometers located immediately upgradient of the Site R landfill. The system was operated in the above manner for the month of February.
- On the night of February 5th, the water level alarm in the valve vault of well EW-2 was triggered and the control program immediately shut the system down. Visual checks the next day revealed 12 to 14 inches of water in the vault, but no signs of leakage from the system. The water was pumped out and the system checked to see if leakage occurred into the vault. No leakage was observed and the system was restarted. The most likely cause for water in the vault is leakage through the cover from torrential overnight rain (over 2 inches). The vault flood alarm also tripped on February 22nd. The pumps were off because of the high river stage and, hence, the system performance was not affected. This time, the alarm indicated that the vault for well EW-3 was flooded. An inspection of the system indicated that the vault was dry and that the problem was a tripped circuit breaker which was reset. The system was tested and performed satisfactorily. The likely cause of the tripped breaker was a power supply transient. Finally, the system was down for short periods on February 12th and 13th because of power supply outages.

- The radio transmitter on the remote relay unit that transmits the signal from the flow meter at the outfall to the control system malfunctioned on February 7th and was replaced on February 12th.
- Comments on various documents submitted to the Agency were received on February 12th. These documents include:
 - Three Technical Memorandums (TMs) for Interim Operating Periods (IOPs) 1, 2 and 3
 - Quarterly Groundwater Sampling Reports
 - Semi-Annual River Sampling Reports
 - Draft Extraction Well Step Test Memo
 - Draft Operations and Maintenance Plan
 - Draft Barrier Wall Completion Report

These comments have been reviewed and the following documents are being prepared for submission to the Agency:

- A Work Plan for computing the mass flux to the river sediments and surface water following construction of the Interim Remedy.
- An Operating Report covering the period between February 2006 and December 2007.
- A remedial Action Completion Report.
- Water level and pumping data for the reporting period are attached.

Schedule

The documents listed above will be used to establish that the Remedial Action at Site R is complete.

Submittals During Reporting Period

There were no submittals during the reporting period.

Work Scheduled for Next Reporting Period

- Continue operating the extraction system to maintain the total pumping rate equal to the computed inflow rate.
- Complete validation of the laboratory data from the fourth quarter 2007 groundwater samples from the performance monitoring wells and submit these data to the Agency.
- Submit the report for the second semi-annual sediment and surface water samples from the Mississippi River
- Collect first quarter 2008 groundwater samples from the performance monitoring wells, as well as the first semi-annual sediment and surface water samples from the Mississippi River.

PUMPING DATA

GROUNDWATER MIGRATION CONTROL SYSTEM

FEBRUARY 2008 DAILY AVERAGE PUMPING RATES AND WATER LEVELS

		PUMPING RATE							
Date/Time		Computed Q	Total Q	EW-1 Q	EW-2 Q	EW-3 Q	SWL		
02/01/2008 [Daily Average	575.41	577.52	288.76	0.00	288.76	384.70		
02/02/2008 [Daily Average	607.86	609.73	304.88	0.00	304.85	384.31		
02/03/2008 [Daily Average	491.21	492.78	246.38	0.00	246.40	385.81		
02/04/2008 [Daily Average	454.40	451.72	225.85	0.00	225.87	386.27		
02/05/2008 [Daily Average	297.88	285.48	142.70	0.00	142.77	387.32		
02/06/2008	Daily Average	66.81	13.68	1.28	11.18	1.22	391.78		
02/07/2008 1	Daily Average	0.00	0.00	0.00	0.00	0.00	393.91		
02/08/2008 1	Daily Average	0.00	0.00	0.00	0.00	0.00	393.10		
02/09/2008 1	Daily Average	0.00	2.80	0.83	0.94	1.03	393.29		
02/10/2008 1	Daily Average	0.95	5.53	1.08	3.42	1.03	392.28		
02/11/2008 1	Daily Average	20.00	21.93	0.00	21.93	0.00	390.54		
02/12/2008 1	Daily Average	175.75	167.80	76.38	15.02	76.40	388.75		
02/13/2008	Daily Average	248.45	203.48	100.74	1.87	100.87	388.32		
02/14/2008	Daily Average	235.81	237.86	118.93	0.00	118.93	388.71		
02/15/2008 1	Daily Average	143.16	158.36	77.38	3.85	77.14	389.63		
02/16/2008	Daily Average	171.37	170.50	85.27	0.00	85.23	389.16		
02/17/2008	Daily Average	216.75	221.89	103.69	14.51	103.69	389.37		
02/18/2008	Daily Average	9.57	13.63	0.00	13.63	0.00	393.65		
02/19/2008	Daily Average	0.00	0.00	0.00	0.00	0.00	396.54		
02/20/2008	Daily Average	0.00	0.00	0.00	0.00	0.00	396.78		
02/21/2008	Daily Average	0.00	0.00	0.00	0.00	0.00	395.31		
02/22/2008	Daily Average	0.00	0.01	0.00	0.00	0.01	394.62		
02/23/2008	Daily Average	0.00	0.00	0.00	0.00	0.00	394.65		
02/24/2008	Daily Average	0.00	0.00	0.00	0.00	0.00	393.46		
	Daily Average	2.52	6.32	0.00	6.32	0.00	392.62		
	Daily Average	3.03	7.51	0.00	7.51	0.00	392.89		
	Daily Average	24.79	25.26	0.00	25.26	0.00	391.66		
	Daily Average	14.46	22.47	0.00	22.47	0.00	391.69		
	Daily Average	42.07	42.18	0.00	42.18	0.00	391.34		

GROUNDWATER MIGRATION CONTROL SYSTEM

FEBRUARY 2008 DAILY AVERAGE PUMPING RATES AND WATER LEVELS

	GROUNDWATER LEVELS											
Date/Time	PZ-5U	PZ-5D	Delta	PZ-6U	PZ-6D	Delta	PZ-7U	PZ-7D	Delta	PZ-8U	PZ-8D	Delta
02/01/2008 Daily Average	388.27	387.77	-0.50	388.40	388.03	-0.37	388.26	387.91	-0.35	388.07	387.39	-0.68
02/02/2008 Daily Average	388.18	387.63	-0.55	388.30	387.95	-0.35	388.18	387.82	-0.36	387.97	387.26	-0.71
02/03/2008 Daily Average	388.26	387.81	-0.45	388.37	388.01	-0.36	388.22	387.89	-0.33	388.06	387.50	-0.56
02/04/2008 Daily Average	388.33	387.94	-0.39	388.45	388.61	0.16	388.31	387.99	-0.32	388.19	387.66	-0.54
02/05/2008 Daily Average	388.47	388.12	-0.35	388.55	390.58	2.03	388.39	388.09	-0.31	388.33	388.77	0.44
02/06/2008 Daily Average	388.92	388.85	-0.07	388.95	390.23	1.28	388.74	388.55	-0.20	388.74	388.77	0.03
02/07/2008 Daily Average	389.33	389.42	0.09	389.22	389.16	-0.06	389.01	388.85	-0.16	389.12	389.54	0.42
02/08/2008 Daily Average	389.53	389.63	0.10	389.47	389.29	-0.18	389.25	389.11	-0.14	389.37	389.80	0.43
02/09/2008 Daily Average	389.68	389.82	0.14	389.61	389.43	-0.18	389.41	389.25	-0.15	389.56	389.99	0.43
02/10/2008 Daily Average	389.76	389.80	0.04	389.66	389.49	-0.18	389.47	389.31	-0.16	389.61	389.92	0.31
02/11/2008 Daily Average	389.81	389.78	-0.03	389.80	389.65	-0.15	389.64	389.47	-0.17	389.73	389.84	0.12
02/12/2008 Daily Average	389.75	389.54	-0.21	389.76	389.58	-0.19	389.63	389.40	-0.22	389.64	389.47	-0.17
02/13/2008 Daily Average	389.66	389.40	-0.25	389.72	389.51	-0.21	389.58	389.34	-0.25	389.52	389.25	-0.27
02/14/2008 Daily Average	389.62	389.41	-0.20	389.70	389.48	-0.22	389.58	389.31	-0.27	389.48	389.20	-0.28
02/15/2008 Daily Average	389.69	389.51	-0.19	389.72	389.47	-0.25	389.57	389.32	-0.25	389.50	389.37	-0.13
02/16/2008 Daily Average	389.82	389.63	-0.20	389.90	389.65	-0.25	389.73	389.49	-0.24	389.67	389.50	-0.17
02/17/2008 Daily Average	389.90	389.71	-0.19	390.02	391.14	1.12	389.84	389.55	-0.29	390.04	389.94	-0.10
02/18/2008 Daily Average	390.15	390.23	0.08	390.11	390.39	0.29	389.87	389.70	-0.17	390.00	390.29	0.29
02/19/2008 Daily Average	390.61	390.94	0.33	390.42	390.21	-0.20	390.17	390.05	-0.12	390.43	391.38	0.94
02/20/2008 Daily Average	390.84	391.27	0.43	390.61	390.43	-0.18	390.38	390.27	-0.11	390.72	391.86	1.14
02/21/2008 Daily Average	391.02	391.36	0.34	390.83	390.66	-0.17	390.62	390.51	-0.11	390.93	391.86	0.93
02/22/2008 Daily Average	391.10	391.34	0.24	390.95	390.77	-0.18	390.75	390.62	-0.13	391.01	391.70	0.69
02/23/2008 Daily Average	391.24	391.46	0.21	391.07	390.88	-0.19	390.88	390.73	-0.15	391.12	391.80	0.68
02/24/2008 Daily Average		391.39	0.09	391.16	391.01	-0.15	390.99	390.83	-0.16	391.17	391.61	0.44
02/25/2008 Daily Average	391.35	391.40	0.05	391.30	391.11	-0.19	391.13	390.96	-0.17	391.26	391.51	0.25
02/26/2008 Daily Average	391.34	391.38	0.03	391.31	391.12	-0.18	391.12	390.94	-0.18	391.23	391.46	0.23
02/27/2008 Daily Average	391.38	391.31	-0.06	391.37	391.12	-0.25	391.18	390.98	-0.20	391.26	391.36	0.10
02/28/2008 Daily Average	391.37	391.33	-0.04	391.36	391.19	-0.16	391.22	391.01	-0.20	391.28	391.34	0.07
_02/29/2008 Daily Average	391.40	391.32	-0.08	391.41	391.19	-0.22	391.23	391.03	-0.21	391.27	391.27	0.00

GROUNDWATER MIGRATION CONTROL SYSTEM

FEBRUARY 2008 DAILY AVERAGE PUMPING RATES AND WATER LEVELS

	GROUNDWATER LEVELS									
	PZ-		PZ-		PZ-		PZ-			
	1_OUTSI	PZ-	2_OUTSI	PZ-	3_OUTSI	PZ-	4_OUTSI	PZ-		
Date/Time	DE	1_INSIDE	DE	2_INSIDE	DE	3_INSIDE	DE	4_INSIDE		
02/01/2008 Daily Average	385.94	385.06	383.91	387.11	383.93	386.22	383.73	384.25		
02/02/2008 Daily Average	385.68	384.92	383.55	386.96	383.53	386.10	383.62	383.99		
02/03/2008 Daily Average	386.49	385.20	384.90	387.21	384.90	386.33	384.48	384.56		
02/04/2008 Daily Average	386.80	385.44	385.40	387.39	385.38	386.52	384.98	385.05		
02/05/2008 Daily Average	387.36	385.81	386.36	387.71	386.29	386.80	385.80	385.83		
02/06/2008 Daily Average	389.96	386.87	390.75	388.57	390.50	387.67	389.47			
02/07/2008 Daily Average	391.67	387.29	393.34	388.96	392.94	388.13	391.23			
02/08/2008 Daily Average	391.38	387.62	392.44	389.26	392.18	388.46	391.12	389.53		
02/09/2008 Daily Average	391.64	387.74	392.72	389.37	392.43	388.55	391.38	389.68		
02/10/2008 Daily Average	391.05	387.77	391.56	389.41	391.38	388.58	390.93	389.70		
02/11/2008 Daily Average	390.14	388.03	389.82	389.60	389.72	388.79	390.08	389.83		
02/12/2008 Daily Average	389.03	387.67	387.99	389.29	387.97	388.47	387.80	387.72		
02/13/2008 Daily Average	388.68	387.45	387.51	389.16	387.47	388.32	387.49	387.65		
02/14/2008 Daily Average	388.88	387.33	387.86	389.10	387.83	388.24	387.25	387.05		
02/15/2008 Daily Average	389.42	387.44	388.83	389.17	388.75	388.28	387.82	387.22		
02/16/2008 Daily Average	389.27	387.71	388.40	389.40	388.36	388.57	387.73	387.65		
02/17/2008 Daily Average	389.50	387.70	388.82	389.39	388.75	388.54	388.25	387.97		
02/18/2008 Daily Average	391.99	388.09	393.13	389.77	392.81	388.87	391.67	390.04		
02/19/2008 Daily Average	394.27	388.58	396.80	390.25	396.32	389.46	393.99	390.74		
02/20/2008 Daily Average	394.73	388.84	397.28	390.48	396.78	389.70	394.58			
02/21/2008 Daily Average	393.85	389.18	395.32	390.77	395.00	390.01	393.80	391.31		
02/22/2008 Daily Average	393.32	389.24	394.34	390.83	394.05	390.06	393.24			
02/23/2008 Daily Average	393.38	389.34	394.40	390.92	394.11	390.16	393.31	391.41		
02/24/2008 Daily Average	392.63	389.47	392.99	391.05	392.80	390.28	392.60	391.42		
02/25/2008 Daily Average	392.19	389.62	392.17	391.16	392.05	390.39	392.15			
02/26/2008 Daily Average	392.29	389.48	392.42	391.08	392.26	390.26	392.23			
02/27/2008 Daily Average	391.76	389.51	391.47	391.13	391.37	390.31	391.73	391.43		
02/28/2008 Daily Average	391.74	389.57	391.45	391.14	391.36	390.32	391.73	391.43		
02/29/2008 Daily Average	391.56	389.56	391.23	391.13	391.12	390.28	391.54	3 <u>91.44</u>		